

Date: Wednesday, 1/11/2006 4:21:51 PM
User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : BRACKET ASSEMBLY
Job Number : 25442D	
Estimate Number : 10291	
P.O. Number : N/A	Part Number : D3183044
This Issue : 1/11/2006 S.O. No. : N/A	Drawing Number : D3183 REV C1
Prsht Rev. : NC	Project Number : N/A
First Issue : N/A Type : MACHINED PARTS	Drawing Revision : C1
Previous Run : 24267D	Material : N/A
Written By : <u>SEE COMMENT BELOW</u>	Due Date : 2/18/2006
Checked & Approved By : <u>SEE COMMENT BELOW</u>	Qty: 4 Um: Each
Comment : Est Rev: Pick: A 04.02.18 New issue KJ/DS	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	M174B2000X01500	17-4 SS Bar
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Comment: Qty.: 0.4812 f(s)/Unit Total: 0.4812 f(s)
Material: 17-4 SS Bar per AMS 5604/5643
(M17-4-B1.500x02.000)
Identify for D3183-044
Batch: ~~M174B2~~ M174B39

M8 06/02/04 M14773
SA 06.02.03
~~SA 06.02.03~~

2.0	BAND SAW	BAND SAW
-----	----------	----------



Comment: BAND SAW 1.500" R
Cut blanks: (1.000" x 2.000") 5.500" long

M8 06/02/04 4
SA 06.02.03 X4

3.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
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Comment: HAAS CNC VERTICAL MACHINING #1

1-Machine D3183-4 as per Folio FA322 and Dwg D3183 Identify as D3183-4 M8 06/02/04

2-Deburr M8 06/02/05

3-Scribe batch number M8 06/02/05

4X

4.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
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Comment: INSPECT PARTS AS THEY COME OFF MACHINE

M8 06/02/05

4X

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: 28 Date: 06/02/03
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
	2	4 blanks cut with wrong size material. Wrong dimension on W/O	<u>AS</u> 06/02/03	Mat'l no good. Make size change AS shown on Step 2. Replace blanks.	<u>SD</u> 06.02.03	<u>2</u> 06-02-06.	<u>AS</u> 06/02/03	<u>2</u> 06-02-06
	3	Part went out of jig	<u>AS</u> 06/02/06	Scrap: destroy. Replace.	<u>MS</u> 06/02/06	<u>2</u> 06-02-06	<u>AS</u> 06/02/06	<u>2</u> 06-02-06

NOTE: Date & initial all entries

Date: Wednesday, 1/11/2006 4:21:51 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BRACKET ASSEMBLY

Job Number: 25442D

Part Number: D3183044

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

QC8

SECOND CHECK



Comment: SECOND CHECK

MR 06/02/06 4

6.0

D312121

Bolt



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number Description Batch
2 D3121-21 Bolt B 25456

7.0

D3183045

Bearing Assembly



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number Description Batch
2 D3183-045 Bearing Ass B 23974

8.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1
Assemble D3183-043 as per Dwg D3183.

BG 06.02.09 4

9.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

BG 06.02.09 4

10.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1
Identify and Stock
Location: 57412

06/02/10 (4)

11.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL
Inspection Level 21

SUC 06/02/13 (4) 06/02/13

Job Completion



Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

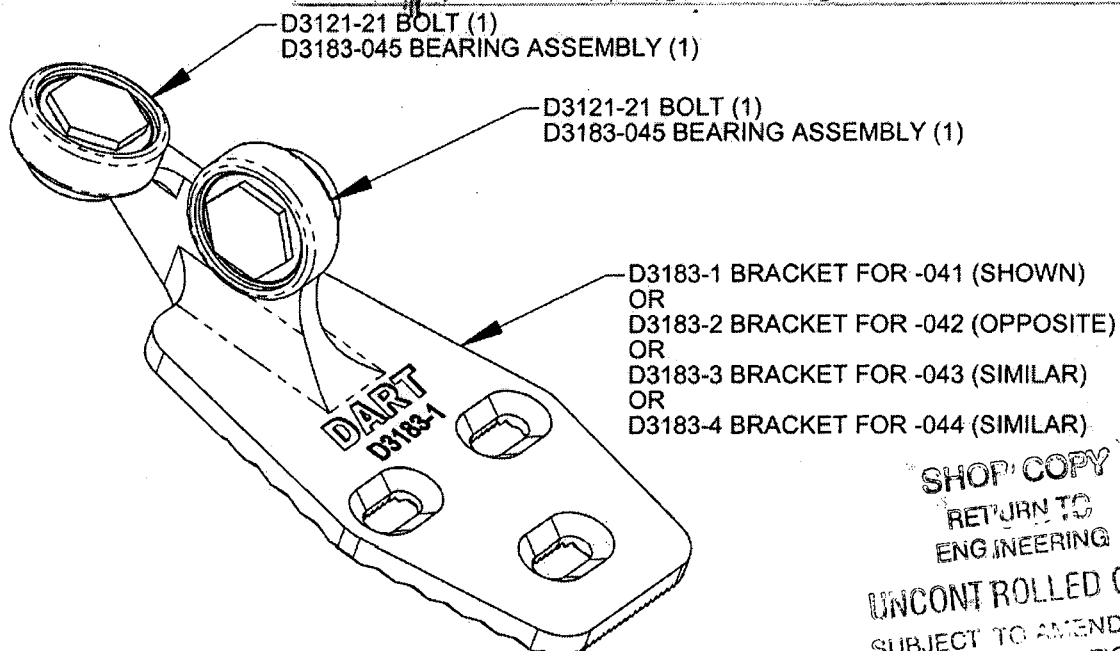
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



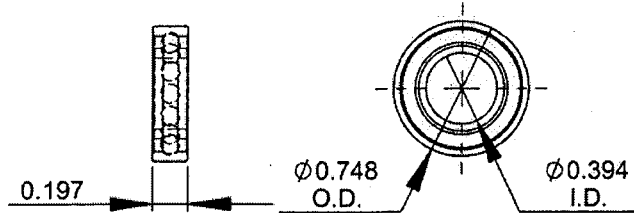
DESIGN #	DRAWN BY CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D3183	REV. C SHEET 1 OF 4
DATE 04.02.17		TITLE BRACKET ASSEMBLY	SCALE 1:1
A	03.01.24	NEW ISSUE	
B	03.06.17	REMOVE BEARING; 1.012 WS 0.882	
C	04.02.17	ADD -045/-9; 0.182 WAS 0.431	
CI	# 04.11.09	0.830 WAS 0.850	

RELEASED
04.03.01



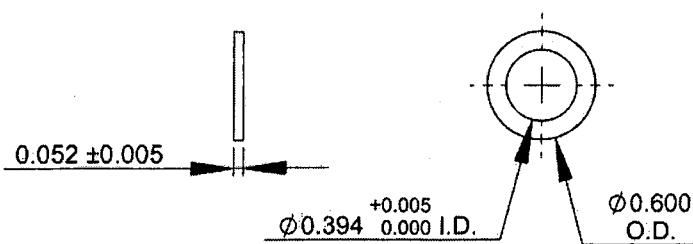
D3183-041 BRACKET ASSEMBLY (SHOWN)
D3183-042 BRACKET ASSEMBLY (OPPOSITE)
D3183-043 BRACKET ASSEMBLY (SIMILAR)
D3183-044 BRACKET ASSEMBLY (SIMILAR)

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WITH NOTICE
WORK ORDER
NO 25442D



D3183-5 BEARING:
SPECIFICATION CONTROL DRAWING

- 1) SINGLE ROW, DEEP GROOVE, CONRAD TYPE, SHIELDED
- 2) POSSIBLE SUPPLIER: NSK P/N 6800ZZ
- 3) ALL DIMENSIONS ARE IN INCHES



D3183-7 WASHER

- 1) MATERIAL: AISI 303 ROUND BAR (M303R) ANNEALED
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES

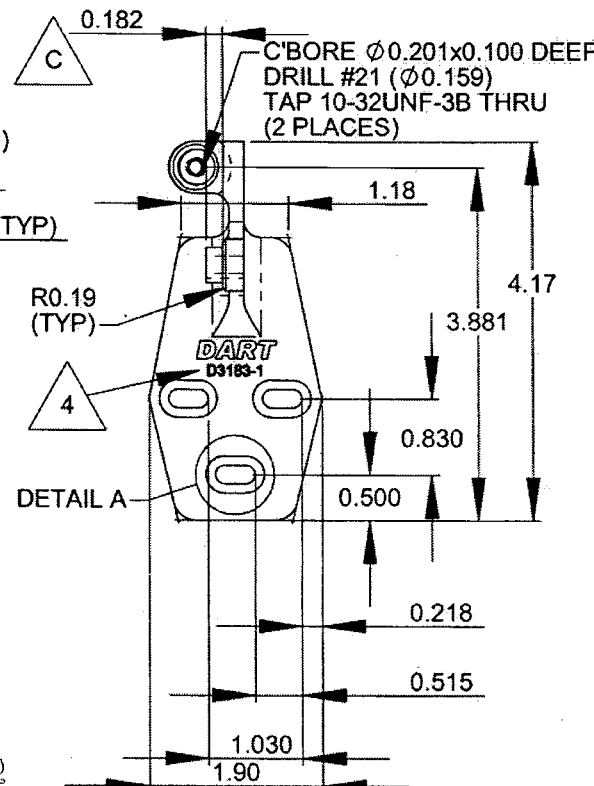
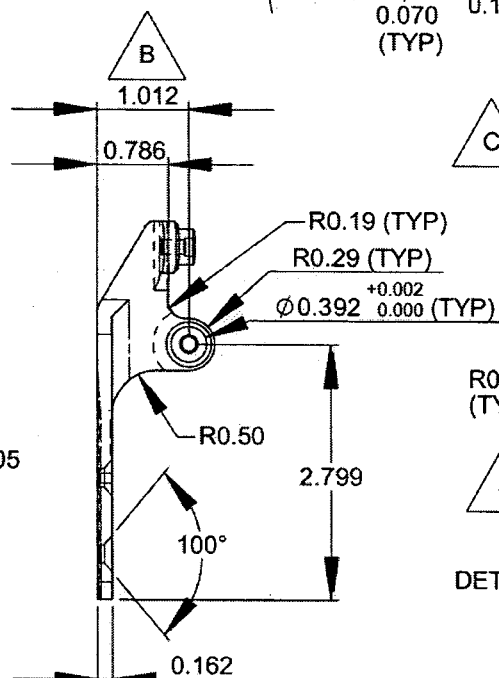
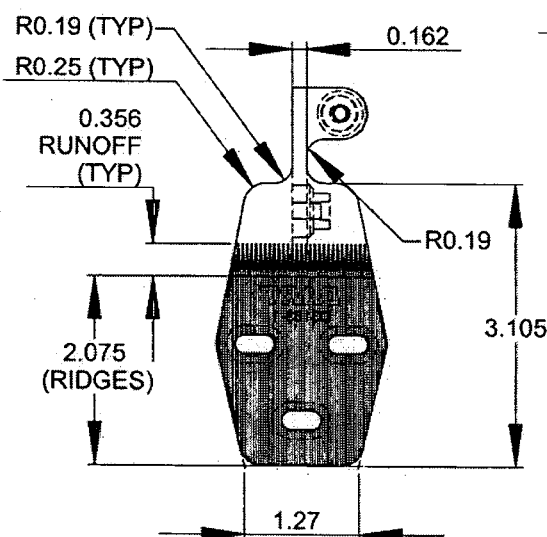
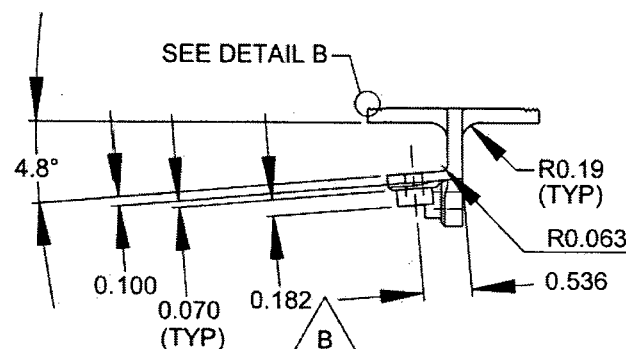
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CHECKED	APPROVED	HAWKESBURY, ONTARIO, CANADA
DATE	TITLE	REV. C
04.02.17	D3183	SHEET 2 OF 4
	BRACKET ASSEMBLY	SCALE 1:2

RELEASED
04.03.01



**D3183-1 BRACKET SHOWN
D3183-2 BRACKET OPPOSITE**

- 1) D3183-1 CAN BE MADE FROM D3183-3
D3183-2 CAN BE MADE FROM D3183-4
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643
(REF DART SPEC. M17-4-B)
MIN ULTIMATE STRENGTH = 150 ksi
MIN YIELD STRENGTH = 100 ksi
- 3) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 4) ENGRAVE DART P/N & LOGO AS SHOWN
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES

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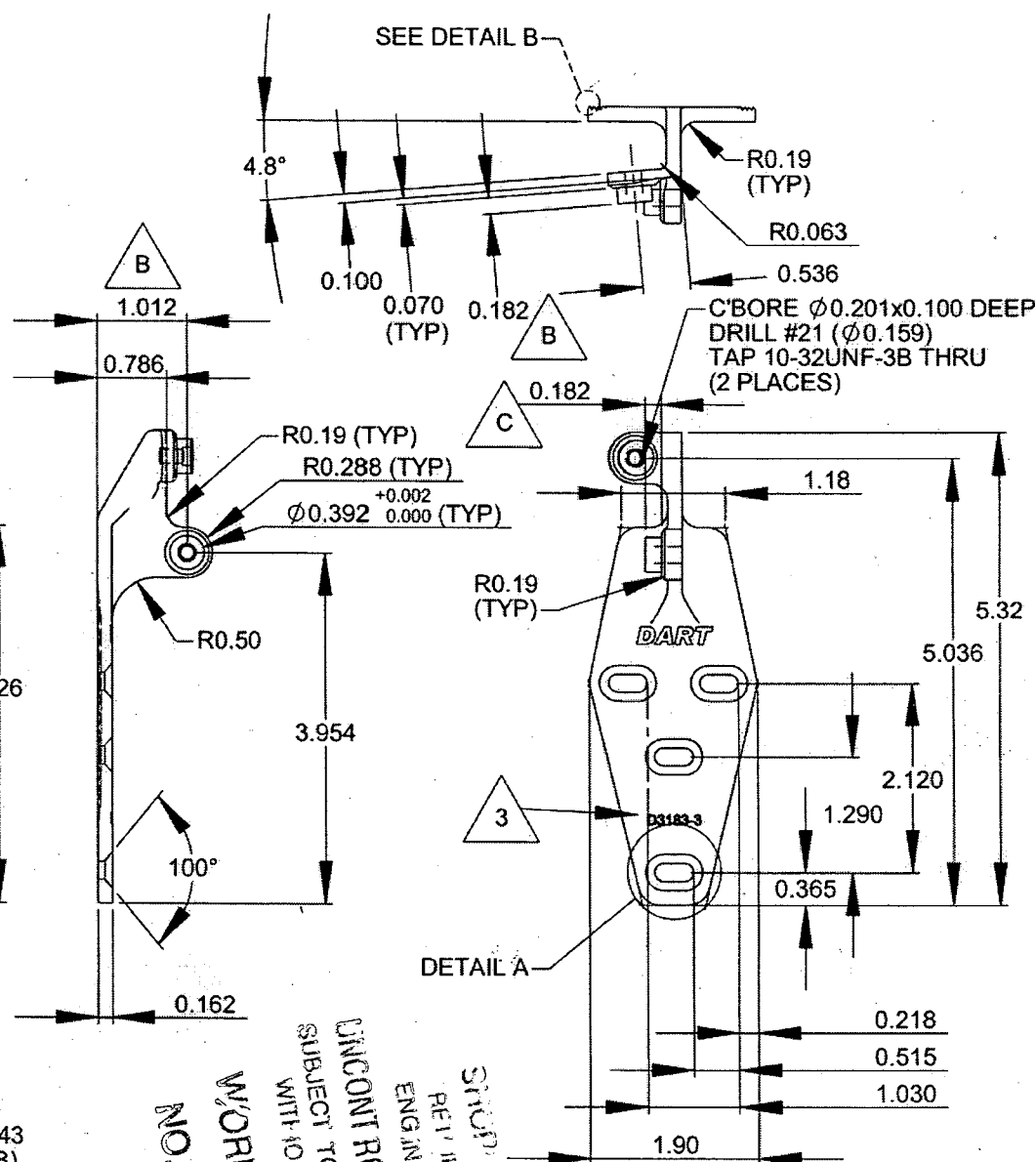
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		HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO.	REV. C
		D3183	SHEET 3 OF 4
DATE	TITLE	SCALE	
04.02.17	BRACKET ASSEMBLY	1:2	



D3183-3 BRACKET SHOWN
(REPLACES BELL P/N 412-030-304-105)
D3183-4 BRACKET OPPOSITE
(REPLACES BELL P/N 412-030-304-106)

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643
(REF DART SPEC. M17-4-B)
MIN ULTIMATE STRENGTH = 150 ksi
MIN YIELD STRENGTH = 100 ksi
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 3) ENGRAVE DART P/N & LOGO AS SHOWN
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES

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ENGINEER
REVIEW
SHIP OFF

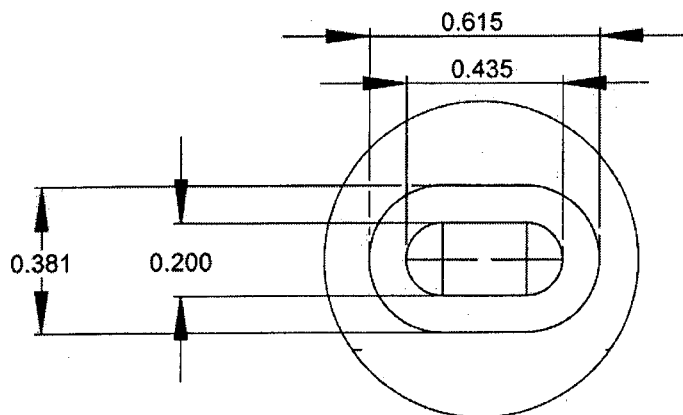
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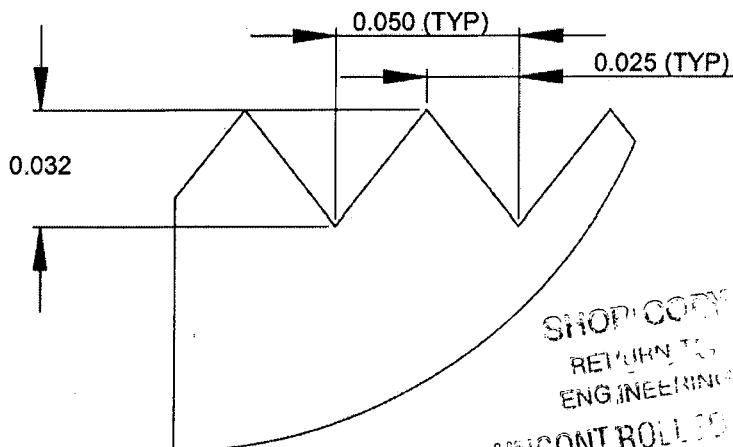


DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3183	REV. C SHEET 4 OF 4
DATE 04.02.17	TITLE BRACKET ASSEMBLY		SCALE 1:1



DETAIL A (2 : 1)

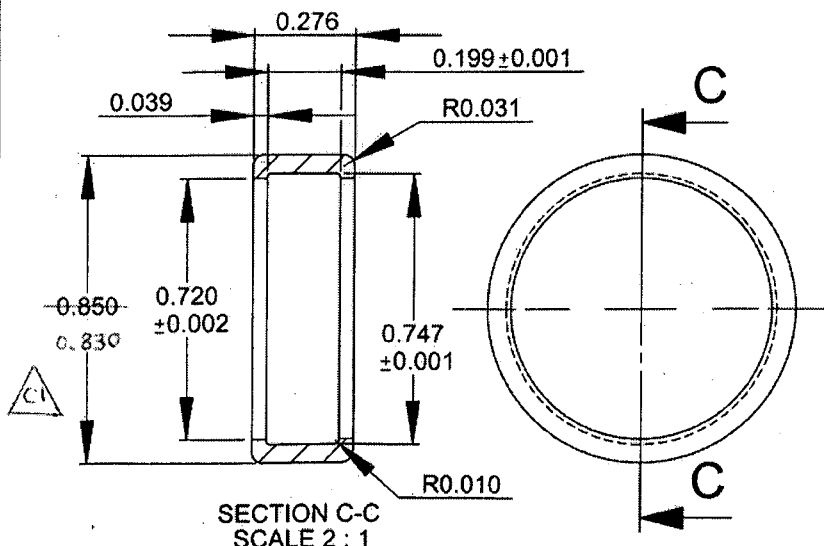
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DETAIL B (20 : 1)

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WOP
25442D



D3183-9 CAP

- 1) MATERIAL: DELRIN ROD, Ø1.00
(REF DART SPEC. M-DELRIN-R1.00)
- 2) TOLERANCES ARE PER DART QSI 018
UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES

D3183-045 BEARING ASSEMBLY

- 1) ASSEMBLE D3183-5 BEARING AND
D3183-9 CAP

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DART AEROSPACE LTD		Work Order:	25442
Description:		Part Number:	3183-4
Inspection Dwg:	Rev:	Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
2.08	±.03	2.08	✓			
1.55	±.00	1.150	✓			
4.26	±.03	4.262	✓			
.71	"	.71	✓			
.162	±.010	.165	✓			
R.19		R 3/16	✓			
R.25		R 1/4	✓			
1.012	±.010	1.016	✓			
.786	"	.785	✓			
R.19		R 3/16	✓			
R.288		9/32	✓			
Ø.392	+0.002 -0.000	Ø.3928	✓			
R.50		R.50	✓			
3.954	±.010	3.954	✓			
.162	"	.159	✓			
.100	"	.103	✓			
.182	"	.178	✓			
C BORE Ø.201X.100		Ø.201X.100	✓			
10-32TAP		Ø.5	✓			
1.18	±.03	1.18	✓			
1.90	"	1.888	✓			
5.32	"	5.339	✓			

Measured by:	MS	Audited by:	En	Prototype Approval:	N/A
Date:	06/02/04	Date:	06/02/04	Date:	

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/RF	

